

Notice of Allowability

Application No.

10/691,270

Examiner

Melvin A. Cartagena

Applicant(s)

PY ET AL.

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3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to examiner's amendment.
2. ☒ The allowed claim(s) is/are 1-19,22-35 and 37-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas J. Ryan on June 4, 2005.

The application has been amended as follows: claims 20, 21, 36, 40 and 41 have been canceled.

Claim 1 has been rewritten as follows;

1. (Currently amended) An ophthalmic dispenser comprising:
a housing;
a trigger coupled to the housing;
a self contained cartridge disposable within the housing and comprising:
a body defining a fluid reservoir;
a pump coupled in fluid communication with the reservoir and defining a compression ~~zone~~ chamber, the pump being ~~engageable~~ movable between (i) a first actuated position, and (ii) a rest position;
a nozzle comprising a valve including an annular, axially-extending valve seat, an outlet aperture coupled in fluid communication between the valve seat and the compression-~~zone~~ chamber, and a flexible valve cover extending about the valve seat and forming an annular, axially-extending interface therebetween, wherein the interface is connectable in fluid communication with the outlet aperture, and at least part of the valve cover is movable between (i) a normally closed position with the valve cover engaging the valve seat to close the interface and form a fluid-tight seal therebetween, and (ii) an open position with at least part of the valve cover spaced away from the valve seat in response to fluid flowing through the outlet aperture at

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a pressure greater than a valve opening pressure to allow the passage of pressurized fluid therebetween; and

~~a manually engageable~~ an actuator coupled to the cartridge and drivingly connected between the trigger and the pump, the actuator having a spring formed integrally therewith, wherein in a first phase of actuation, the trigger is manually engaged to cause the actuator to actuate the pump from the rest position to the first actuated position, and in a second phase of actuation, the trigger is released to cause the pump to return to the rest position, whereby during actuation, the pump pressurizes fluid in the compression-zone chamber and, in turn, dispenses a metered dosage of fluid through the valve and into a user's eye.

Claim 2 has been rewritten as follows;

2. (Currently amended) An ophthalmic dispenser as defined in claim 1, wherein the pump includes a slide defining an axially-elongated passageway and a piston slidably received within the axially-elongated passageway, wherein the slide defines within the axially-elongated passageway ~~the~~ a compression zone, a first portion formed between the compression zone and the reservoir, and a second portion located on an opposite side of the compression zone relative to the first portion, wherein the first portion is defined by a first radius and the compression zone is defined by a second radius that is less than the first radius, and at least one of the piston and slide is movable relative to the other ~~the pump being engageable~~ between (i) the first actuated position with the tip of the piston received within the first portion of the slide, and the compression zone coupled in fluid communication with the reservoir for receiving fluid therefrom, and (ii) the rest position with a tip of the piston received within the second portion of

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the slide, and the spring is drivingly connected to at least one of the piston and slide for moving at least one of the piston and slide relative to the other.

Claim 8 has been rewritten as follows;

8. (Currently amended) An ophthalmic dispenser as defined in claim 1, wherein the volume of the compression-~~zone~~ chamber is approximately equal to the volume of the metered dosage of fluid dispensed through the valve.

Claim 15 has been rewritten as follows;

15. (Currently amended) An ophthalmic dispenser for dispensing a fluid, the dispenser comprising:

a housing;

a trigger coupled to the housing;

an eyelid depressor operatively coupled to the trigger and engageable with facial tissue adjacent to a user's eye for moving the tissue and, in turn, lowering the adjacent eyelid; and

a self contained cartridge disposable within the housing and comprising:

a vial, the vial including an interior, variable volume, fluid receiving chamber defined therein;

a pump in fluid communication with the fluid receiving chamber for pumping a fluid received therein from the dispenser, the pump defining a compression ~~zone~~ chamber and being ~~engageable~~ movable between (i) a first actuated position, and (ii) a rest position;

a nozzle disposed in fluid communication with the pump for allowing the passage of the pumped fluid therethrough, the nozzle comprising a valve seat and a flexible valve cover extending about the valve seat and forming an annular, axially-extending interface therebetween, wherein the interface is connectable in fluid communication with the compression chamber, and at least part of the valve cover is movable between (i) a

normally closed position with the valve cover engaging the valve seat to close the interface and form a fluid-tight seal therebetween, and (ii) an open position with at least part of the valve cover spaced away from the valve seat in response to fluid flowing from the compression chamber at a pressure greater than a valve opening pressure to allow the passage of pressurized fluid therebetween;

a casing that retains the nozzle, the pump, and the vial arranged in that order along a longitudinal axis moving in a direction toward a posterior end of the dispenser, the casing having an anterior wall with an aperture for receiving the nozzle; and ~~a manually engageable~~ an actuator coupled to the casing and responsive to the ~~first actuator trigger~~, the actuator defining a spring formed integrally therewith and being having at least a portion disposed outside the casing and at least a portion disposed internal to the casing and operatively coupled to at least one of the pump and the vial, wherein in a first phase of actuation, the trigger is manually engaged to cause the actuator to actuate the pump from the rest position to the first actuated position, and in a second phase of actuation, the trigger is released to cause the pump to return to the rest position, whereby during actuation, the actuator pressurizes fluid in the compression ~~zone~~ chamber and, in turn, dispenses a metered dosage of fluid through the valve and into a user's eye.

Claim 17 has been rewritten as follows;

17. (Currently amended) An ophthalmic dispenser as defined in claim 15, wherein the ~~manually engageable~~ actuator has a first end and a second end, the first end being pivotably mounted to the casing, the second end being operatively coupled to the pump, the actuator further having a pivot disposed between the first end and the second end.

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Claim 22 has been rewritten as follows;

22. (Currently amended) An ophthalmic dispenser for dispensing a fluid, the dispenser comprising:

a housing;

a trigger coupled to the housing;

an eyelid depressor operatively coupled to the trigger and engageable with facial tissue adjacent to a user's eye for moving the tissue and, in turn, lowering the adjacent eyelid; and

a self contained replaceable cartridge disposable within the housing and having:

a posterior portion including a vial, the vial including an interior fluid receiving chamber defined therein;

a pump in fluid communication with the fluid receiving chamber for pumping an ophthalmic fluid received therein from the dispenser, the pump defining a compression ~~zone~~ chamber and being ~~engageable~~ movable between (i) a first actuated position, and (ii) a rest position;

a nozzle disposed in fluid communication with the pump for allowing the passage of the pumped fluid therethrough, the nozzle comprising a valve including a valve seat and a flexible valve cover extending about the valve seat and forming an annular, axially-extending interface therebetween, wherein the interface is connectable in fluid communication with the compression chamber, and at least part of the valve cover is movable between (i) a normally closed position with the valve cover engaging the valve seat to close the interface and form a fluid-tight seal therebetween, and (ii) an open position with at least part of the valve cover spaced away from the valve seat in response to fluid flowing from the compression chamber at a pressure greater than a valve opening pressure to allow the passage of pressurized fluid therebetween;

a casing that retains the nozzle, the pump, and the posterior portion arranged in that order along a longitudinal axis moving in a direction toward a posterior end of the dispenser, ~~the pump being operationally coupled to at least a portion of the posterior portion to move along the longitudinal axis in concert with movement of said at least a portion of the posterior portion along said axis,~~ the casing having an anterior wall with an aperture for receiving the nozzle; and

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an actuator operatively coupled to the ~~at least a portion of the posterior portion and to the trigger,~~
pump and eyelid depressor, wherein in a first phase of actuation, the trigger is manually engaged
to cause the actuator to actuate the pump from the rest position to the first actuated position, and
to move the eyelid depressor to, in turn, lower an adjacent eyelid, whereby during actuation, the
actuator pressurizes fluid in the compression chamber and, in turn, dispenses a metered dosage of
fluid through the valve and into a user's eye~~move the at least a portion of the posterior portion~~
~~along the longitudinal axis in a direction toward the posterior end of the casing and thereby~~
~~causes the pump to move in the same direction~~, and in a second phase of actuation, the trigger is
released to cause the pump to return to the rest position~~cause the posterior portion to move along~~
~~the longitudinal axis in a direction toward the anterior end of the casing and thereby causes the~~
~~pump to move in a direction toward the anterior end of the casing.~~

Claim 26 has been rewritten as follows;

26. (Currently amended) An ophthalmic dispenser for dispensing a fluid, the dispenser comprising:

- a housing;
- a trigger coupled to the housing;
- a cartridge disposable within the housing and having:
 - a vial, the vial including an interior fluid receiving chamber defined therein;
 - a pump in fluid communication with the fluid receiving chamber and defining a compression zone chamber, for pumping an ophthalmic fluid received therein from the dispenser;
 - a nozzle disposed in fluid communication with the pump for allowing the passage of the pumped fluid therethrough;
 - a spring portion disposed posterior to said interior fluid receiving chamber defined

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therein;

a casing that retains the nozzle, the pump, and the vial arranged in that order along a longitudinal axis moving in a direction toward a posterior end of the dispenser, the casing having an anterior wall with an aperture for receiving the nozzle; and
an actuator formed integral with the spring and operatively coupled to the pump and to the trigger, wherein in a first phase of actuation, the trigger is manually engaged to cause the actuator to move the pump along the longitudinal axis in a direction toward the posterior end of the casing thereby applying force to the interior fluid receiving chamber and compressing the spring, and in a second phase of actuation, the trigger is released and the compressed spring applies a force to help propel the pump in a direction toward the anterior end of the casing.

Claim 27 has been rewritten as follows;

27. (Currently amended) An ophthalmic dispenser for dispensing a fluid, the dispenser comprising:

- a housing;
- a trigger coupled to the housing;
- a self contained replaceable cartridge disposable within the housing and having:
 - a vial, the vial including an interior fluid receiving chamber defined therein;
 - a pump in fluid communication with the fluid receiving chamber and defining a compression ~~zone~~, chamber for pumping an ophthalmic fluid received therein from the dispenser;

- a nozzle disposed in fluid communication with the pump for allowing the passage of the pumped fluid therethrough, the nozzle comprising a valve including a valve seat and a flexible valve cover extending about the valve seat and forming an annular, axially-extending interface therebetween, wherein the interface is connectable in fluid communication with the compression chamber, and at least part of the valve cover is movable between (i) a normally closed position with the valve cover engaging the valve seat to close the interface and form a fluid-tight seal

therebetween, and (ii) an open position with at least part of the valve cover spaced away from the valve seat in response to fluid flowing from the compression chamber at a pressure greater than a valve opening pressure to allow the passage of pressurized fluid therebetween;

a casing that retains the nozzle, the pump, and the vial, the casing having an anterior wall with an aperture for receiving the nozzle; and
an actuator being operatively coupled to the trigger and the pump and having a spring formed integral therewith, wherein in a first phase of actuation, the trigger is manually engaged to cause the actuator to actuate the pump from the rest position to the first actuated position, and in a second phase of actuation, the trigger is released to cause the pump to return to the rest position, whereby during actuation, the actuator pressurizes fluid in the compression ~~zone~~ chamber and, in turn, dispenses a metered dosage of fluid through the valve and into a user's eye.

Claim 31 has been rewritten as follows;

31. (Currently amended) An ophthalmic dispenser comprising:

a housing;

a trigger coupled to the housing;

a self contained cartridge disposable within the housing and comprising:

first means for forming a fluid reservoir;

a pump coupled in fluid communication with the reservoir and including a passageway and second means for pumping fluid within the passageway, wherein the pump defines within the passageway a compression-~~zone~~ chamber, the pump being engageable between (i) a first actuated position and (ii) a rest position;

a nozzle comprising a valve including an annular, axially-extending valve seat, an outlet aperture coupled in fluid communication between the valve seat and the compression-~~zone~~ chamber, and a flexible valve cover extending about the valve seat and forming an annular, axially-extending interface therebetween, wherein the interface is connectable in fluid communication with the outlet aperture, and at least part of the valve cover is movable between

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(i) a normally closed position with the valve cover engaging the valve seat to close the interface and form a fluid-tight seal therebetween, and (ii) an open position with at least part of the valve cover spaced away from the valve seat in response to fluid flowing through the outlet aperture at a pressure greater than a valve opening pressure to allow the passage of pressurized fluid therebetween; and

~~a manually engageable~~ an actuator coupled to the cartridge and drivingly connected between the trigger and the pump, the actuator having a spring formed integrally therewith, wherein in a first phase of actuation, ~~the actuator trigger~~ the trigger is manually engaged to cause the actuator to actuate the pump from ~~the~~ the rest position to the first actuated position, and in a second phase of actuation, the trigger is released to cause the pump to return to the rest position, whereby during actuation, the pump pressurizes fluid in the ~~compression-zone~~ chamber to dispense fluid through the valve and into a user's eye.

Claim 33 has been rewritten as follows;

33. (Currently amended) An ophthalmic dispenser as defined in claim 32, wherein the pump defines an elongated axis, and ~~the manually engageable~~ actuator defines a path of movement transverse to the elongated axis of the pump.

Claim 34 has been rewritten as follows;

34. (Currently amended) An ophthalmic dispenser as defined in claim 31, wherein the ~~manually engageable~~ actuator includes a lever arm drivingly connected to at least one of the first means and the pump, wherein the lever arm is engageable by the trigger for moving at least one of the second means and axially-elongated passageway relative to the other.

Claim 38 has been rewritten as follows;

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38. (Currently amended) An ophthalmic dispenser as defined in claim 31, further comprising an eyelid depressor engageable with the facial tissue adjacent to ~~an~~ a user's eye for moving the tissue and, in turn, lowering the adjacent eyelid, and wherein the ~~manually~~ engageable actuator is drivingly connected to both the eyelid depressor and at least one of the first means and the pump for substantially simultaneously actuating the eyelid depressor and the pump.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on T-F (7:30AM to 6:00 PM).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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